

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): A ceramic heater for heating a semiconductor wafer, comprising:

a ceramic substrate having a first surface and a second surface, the first surface being arranged as a heating face configured to heat the semiconductor wafer;

a resistance heating element formed on the second surface of said ceramic substrate or inside said ceramic substrate, and including at least two circuits;

temperature-measuring means for measuring ~~[[the]]~~ a temperature of said ceramic substrate or ~~an object to be heated~~ a temperature of the semiconductor wafer;

a control unit configured to supply electric power to said resistance heating element;

a memory unit configured to store the temperature data measured by said temperature-measuring means; and

an operation unit configured to calculate, based on said temperature data, electric power data required for said resistance heating element to attain a uniform temperature of the ~~first surface~~ heating face, wherein different electric power is supplied to each of the at least two circuits based on the calculated electric power data.

Claim 2 (currently amended): A ceramic heater for heating a semiconductor wafer, comprising:

a ceramic substrate having a first surface and a second surface, the first surface being arranged as a heating face configured to heat the semiconductor wafer;

a resistance heating element formed on the second surface of said ceramic substrate or inside said ceramic substrate, and including at least two circuits;

temperature-measuring means for measuring ~~[[the]]~~ a temperature of said ceramic substrate or ~~an object to be heated~~ a temperature of the semiconductor wafer;

a power source configured to supply electric power to said resistance heating element;
a control unit configured to control the power source;
a memory unit configured to store the temperature data measured by said temperature-measuring means; and

means for calculating, based on said temperature data, electric power data required for said resistance heating element to attain a uniform temperature of the first surface,

wherein different electric power is supplied to each of the at least two circuits based on the calculated electric power data.

Claim 3 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 1, wherein said temperature-measuring means comprises a temperature-measuring element.

Claim 4 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 1, wherein said temperature-measuring means comprises a thermoviewer.

Claim 5 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 2, wherein said temperature-measuring means comprises a temperature-measuring element.

Claim 6 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 2, wherein said temperature-measuring means comprises a thermoviewer.

Claim 7 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 1, wherein said ceramic substrate comprises a nitride ceramic or a carbide ceramic.

Claim 8 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 1, wherein said temperature-measuring means comprises a thermocouple.

Claim 9 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 1, wherein said ceramic heater comprises plural temperature-measuring means.

Claim 10 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 2, wherein said ceramic substrate comprises a nitride ceramic or a carbide ceramic.

Claim 11 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 2, wherein said temperature-measuring means comprises a thermocouple.

Claim 12 (previously presented): The ceramic heater for heating a semiconductor wafer according to claim 2, wherein said ceramic heater comprises plural temperature-measuring means.

Claim 13 (new): The ceramic heater of claim 1, further comprising:
a lifter pin configured to support the semiconductor wafer above and away from the heating face when the semiconductor wafer is heated by the heating face.

Claim 14 (new): The ceramic heater of claim 2, further comprising:
means for supporting the semiconductor wafer above and away from the heating face when the semiconductor wafer is heated by the heating face.

Claim 15 (new): A method for heating a semiconductor wafer, comprising:
positioning the semiconductor wafer above a ceramic substrate, the ceramic substrate having a first surface and a second surface, and the first surface being arranged as a heating face configured to heat the semiconductor wafer;

heating the heating face with at least two heating circuits formed on the second surface of the ceramic substrate or inside the ceramic substrate;

heating the semiconductor wafer with the heating face;

obtaining temperature data associated with a temperature of the ceramic substrate or a temperature of the semiconductor wafer;

calculating, based on the temperature data, electric power data associated with attaining a uniform temperature of the heating face; and

supplying different electric power to each of the at least two heating circuits based on the electric power data.

Claim 16 (new): The method of claim 15, wherein,

the positioning includes supporting the semiconductor wafer at a distance above the heating face, and

the heating of the semiconductor wafer includes heating the semiconductor wafer when the semiconductor wafer is supported at the distance above the heating face.

Claim 17 (new): The method of claim 15, wherein the obtaining includes measuring the temperature of the ceramic substrate with at least one thermocouple.

Claim 18 (new): The method of claim 15, wherein the obtaining includes optically measuring the temperature of the semiconductor wafer.